| Index of Cla | ims    |                            | olication | on/Control No. | Applicant(s)/Patent under<br>Reexamination TAIRA, SHIGEHARU |               |    |  |  |  |
|--------------|--------|----------------------------|-----------|----------------|---|---------------|----|--|--|--|
|              |        | Exa                        | miner     | •              |   | Art Unit 2856 |    |  |  |  |
|              | (7)    |                            | ] [-      |                |   | 1             | _1 |  |  |  |
| √ Rejected   | - (Ini | ough numeral)<br>Cancelled | N         | Non-Elected    | Α   | Appeal        |    |  |  |  |
| = Allowed    | ÷      | Restricted                 | 1         | Interference   | 0   | Objected      |    |  |  |  |

| Cla      | aim      |  |              |  | -            | Date     | e              |          |          | $\Box$   | Γ        | Cla    | im       |                | -           |   | Di   | ate  |   |         |                    |   | Cla             | aim      |           | _   |   | Da      | ite   |                         |              |                 |
|----------|----------|--|--------------|--|--------------|----------|----------------|----------|----------|----------|----------|--------|----------|----------------|-------------|---|--|--|---|---------|--------------------|---|-----------------|----------|-----------|---|---|---------|---|-------------------------|--------------|-----------------|
|          | Т —      | Π  |              |  |              |          | Γ              |          |          |          |          |        |          |                | T           | T   | Т  | Т  | Т   |         | Т                  | 1 |                 |          |           |   |   |         | T   | T                       | П            |                 |
| <u></u>  | 22       | 8  |              |  |              |          | l              |          |          |          | - [      | _<br>ਯ | na       |                |             | - 1   |  |  | ì   |         |                    |   | ایجا            | <u> </u> |           |   |   |         |   |                         | ΙI           |                 |
| Final    | <u>.</u> | 6/23/05  |              |  |              |          |                |          | i I      |          | 1        | Final  | iĝi      |                |             | - 1   | -  |  |   |         |                    | l | Final           | ΪĐ       |           |   |   |         | 1   | 1                       | 1 1          |                 |
| "-       | Original | 9  |              |  |              |          |                |          |          |          | - 1      | ш.     | Original |                | - 1         |   |  |  |   |         |                    |   | "               | Original |           |   |   |         | 1   |                         | 1 1          |                 |
|          |          | 1  | <u> </u>     | -  | ├            |          | <del> </del> − |          | $\vdash$ | -        | F        |        |          | -              | $\dashv$    | +   | -+-  |  | +   |         | ╁                  | l |                 |          | $\dashv$  |   | +   | +       | +-  | -                       | <del> </del> | $\dashv$        |
| <u> </u> | 1        | V  | <u> </u>     | <b> </b>   | <u> </u>     | ₩        | ├              | -        | Н        | -        | ⊢        |        | 51       | _              | -+          | +   | _  | -  | 4   | -       | ╄                  | l |                 | 101      | 4         | +   | 4   | 4       | $\bot$  | —                       | $\sqcup$     |                 |
|          | 2        | 4  |              | _  | L            | _        | _              | ш        | Ш        | Ц.       | ⊢        |        | 52       |                | _           | _   | 4  | _  | _   | _       | $oldsymbol{\perp}$ | l | <u> </u>        | 102      | _         | Д.  | 4   | 4.      | _   | ┸                       | Ш            |                 |
|          | 3        | Щ  | _            | _  | ┖            | <u> </u> | ┖.             | Ш        | Ш        |          | L        |        | 53       | Щ              |             | _   | $\perp$  | $\perp$  | ┸   |         | ↓                  | ĺ |                 | 103      |           |   |   | _       |   | $\bot$                  | Ш            |                 |
|          | 4        | Ш  |              | L  | L            | _        | _              |          | Ш        | _        | L        |        | 54       |                |             |   |  |  | $\perp$   | $\bot$  |                    | į |                 | 104      |           |   |   |         |   |                         | Ш            |                 |
|          | 5        | Ш  |              |  |              |          |                |          |          |          | L        |        | 55       |                | L           |   |  | $oldsymbol{\bot}$                              |   |         | <u> </u>           | ĺ |                 | 105      |           |   |   |         |   |                         | $\Box$       |                 |
|          | 6        | Ц  |              |  |              |          |                |          | $\sqcup$ |          | L        |        | 56       |                |             |   |  |  |   |         |                    |   |                 | 106      |           |   |   |         |   |                         |              |                 |
|          | 7        | 4  |              | L.   |              |          |                |          |          |          |          |        | 57       |                |             |   |  |  |   |         |                    |   |                 | 107      |           |   |   |         |   |                         |              |                 |
|          | 8        |  |              |  |              |          | Π              |          |          |          |          |        | 58       |                |             |   |  |  | Т   |         |                    |   |                 | 108      |           |   |   |         |   |                         |              |                 |
|          | 9        |  |              | Π  | Г            | П        | Π              |          |          |          | Г        |        | 59       |                | $\neg \top$ | Т   | Т  | T  | Т   | $\top$  | Т                  |   |                 | 109      |           | Т   | Т   | Т       | Т   | Т                       |              |                 |
|          | 10       |  | Γ            | Π  | Γ            | Π        | Π              | П        | П        | $\neg$   | Γ        |        | 60       |                |             | T   | $\top$   |  | Τ   | Τ       | 1                  | } |                 | 110      |           | $\top$  | $\top$  | T       | Τ   | Τ                       | П            |                 |
|          | 11       |  |              |  |              |          | П              | П        | П        |          |          |        | 61       |                | $\Box$      |   | T  | $\top$   | Т   | T       |                    |   |                 | 111      |           | T   | $\top$  | Т       | T   | T                       | П            |                 |
|          | 12       | $\vdash$   | Г            |  |              | $\vdash$ | Π              | $\sqcap$ | П        | $\neg$   | F        |        | 62       | $\Box$         | $\neg$      | $\neg$  | $\top$   | $\top$   | $\top$  | $\top$  | $\top$             | 1 |                 | 112      | $\neg$    | $\top$  | $\top$  | $\top$  | $\top$  | $\top$                  | П            |                 |
|          | 13       | Г  |              | П  | T            | Т        | Т              | П        | П        | $\neg$   | F        |        | 63       | $\Box$         | $\dashv$    | 十   | $\top$   | $\top$   | $\top$  | $\top$  | 1                  | 1 |                 | 113      | $\top$    | $\top$  | $\top$  | $\top$  | $\top$  | T                       | П            | $\Box$          |
|          | 14       |  | Т            | Т  | T            | т        | T              | T        | П        | $\dashv$ | F        |        | 64       | $\Box$         | $\dashv$    | 十   | $\dashv$                                       | 十  | $\top$  | $\top$  | T                  | 1 |                 | 114      | $\dashv$  | $\top$  | 十   | 十       | _   | 1                       | П            | $\dashv$        |
|          | 15       | <del>                                     </del> | $\vdash$     | $\vdash$   | T            | $\vdash$ | $t^-$          | Н        | Н        | $\dashv$ | 卜        |        | 65       | $\vdash$       | $\dashv$    | $\dashv$  | +  | +  | +   | +       | +                  | 1 |                 | 115      | $\dashv$  | +   | +   | +       | +   | 1                       | $\vdash$     | $\dashv$        |
| $\vdash$ | 16       | $\vdash$   | $\vdash$     | <del>                                     </del> | t            | +-       | +              | $\vdash$ | Н        | $\dashv$ | H        | -      | 66       | $\vdash$       | $\dashv$    | +   |  | +  | +   | ╅       | +                  | 1 |                 | 116      | $\dashv$  | +   | 十   | +       | +   | +                       | Н            | $\vdash$        |
| -        | 17       | 1  | $\vdash$     |  | $\vdash$     | $\vdash$ | $\vdash$       | Н        | Н        | $\dashv$ | H        |        | 67       | $\vdash$       | $\dashv$    | $\dashv$  | $\dashv$                                       | +  | +   | +       | +-                 | 1 | $\vdash$        | 117      | $\dashv$  | +   | +   | +       | +-  | +                       | Н            | Н               |
| ├─       | 18       | $\vdash$   | ⊢            | ┢  | ╁            | ╁╌       | ╁╴             | -        | $\vdash$ | -        | -        |        | 68       |                | $\dashv$    | -+  | ┿  | +  | +   | ╁       | +                  |   | $\vdash$        | 118      | +         | +   | +   | ╅       |   | +                       | H            | Н               |
| -        | 19       | ⊢  | -            | -  | -            | +-       | +-             | $\vdash$ | $\vdash$ | $\dashv$ | -        |        | 69       | Н              | +           | +   | +  | +  | ╫   | +       | +                  | ł | $\vdash \vdash$ | 119      | +         | +   | +   | ╁       | +-  | +                       | $\vdash$     | $\vdash$        |
| <u> </u> |          | <del> </del>                                     | -            | $\vdash$   | ╀            | ╀        | $\vdash$       | $\vdash$ | $\vdash$ | $\dashv$ | -        |        |          | $\vdash$       | $\dashv$    | +   | +  | +  | +   | +       | +                  | ł | $\vdash$        |          | $\dashv$  | +   | +   | +       | +   | +                       | Н            | $\vdash\dashv$  |
| -        | 20       | $\vdash$   | <del> </del> | <del> </del>                                     |              |          | ╂              | $\vdash$ |          | $\dashv$ |          |        | 70       | Н              | $\dashv$    | +   | +  | +  | 4   | +       | +-                 | 1 | <u> </u>        | 120      | -         | +   | +   | +       | +   | +                       | -            | $\vdash \vdash$ |
|          | 21       | <u> </u>   | 1            | <del> </del>                                     | -            |          | ╀              | $\vdash$ | Н        | _        | $\vdash$ |        | 71       | Ш              | $\dashv$    | 4   | +  | +  | 4   | -       | 4                  |   | <u> </u>        | 121      | _         | - -   | 4   | +       | +   | +                       | $\vdash$     | $\vdash \vdash$ |
|          | 22       | <u> </u>   | <b>!</b>     | ⊢  | ┞            | ╀        | ↓_             | $\sqcup$ | $\vdash$ | _        | -        |        | 72       | $\square$      |             | -   | +  | +  | +   | +       | ↓                  | l | <u> </u>        | 122      | +         | $\perp$   | $\bot$  | $\perp$ | $\perp$   | +                       | -            | $\sqcup$        |
| L        | 23       | <b></b>  | <u> </u>     | <b>!</b>   | <b> </b>     | ١_       | 1_             | $\sqcup$ | $\sqcup$ | _        | _        |        | 73       |                | $\dashv$    | _   | _  | _ _  | 4   | 4       | —                  | Į |                 | 123      | _         |   |   | $\perp$ | _   | _                       | 1            | Щ               |
| <u></u>  | 24       | <u> </u>   | _            | _  | $\perp$      | <u> </u> | 上              | $\perp$  | Ш        |          | L        |        | 74       | Щ              | _           | $\perp$   | $\perp$  | $\perp$  | 4   | _       | _                  | [ | $\sqcup$        | 124      | _         | $\perp$   | $\perp$   | _       |   | 1_                      | $\sqcup$     | Ш               |
| L        | 25       | L  | _            | $\vdash$   | <u> </u>     | ╙        | ↓_             | Ш        | Ш        | Ц        | L        |        | 75       | Ш              | _           | _   | $\perp$  | $\bot$   | 4   | _       | 1_                 | l |                 | 125      | _         | $\perp$   | ┸   | 4       | $\perp$   | $\perp$                 | Ш            | Ш               |
|          | 26       |  |              |  |              |          |                | $\sqcup$ | Ш        |          | L        |        | 76       |                |             |   |  |  |   |         |                    |   |                 | 126      |           | $\perp$   |   | $\perp$ |   |                         | Ш            | Ш               |
| L        | 27       | <u> </u>   | L            |  |              |          | L              |          |          | _]       | Ĺ        |        | 77       |                |             |   |  |  |   |         |                    |   |                 | 127      | $\Box$    |   |   |         |   |                         |              |                 |
|          | 28       |  |              |  |              | $\Box$   |                |          |          |          |          |        | 78       |                |             | $\perp$   | $\Box$   |  |   |         |                    | ] |                 | 128      |           | $\perp$   |   | $\perp$ |   |                         |              |                 |
|          | 29       |  |              |  |              |          |                |          |          |          | Γ        |        | 79       |                |             |   |  |  | $\prod$   | $\perp$ |                    |   |                 | 129      |           |   |   |         |   |                         |              |                 |
|          | 30       |  |              |  |              |          |                |          | П        | $\neg$   | Γ        |        | 80       |                | $\neg$      | T   | $\top$   | $\neg$   | T   | T       |                    | 1 |                 | 130      | $\neg$    | Т   | Т   | $\top$  | Τ   | T                       |              |                 |
|          | 31       | Г  | Π            | Π  | Τ            | Г        | Т              | П        | П        | $\neg$   | ٢        |        | 81       | П              | $\neg$      | 寸   | $\top$   | 7  | $\top$  | $\top$  | $\top$             | 1 |                 | 131      | $\neg$    | 7   | ┪   | ┰       | Τ   | $\top$                  | П            |                 |
|          | 32       |  |              | Г  | Г            | Т        | T              | П        | П        |          |          |        | 82       | П              | 寸           | 丁   | $\top$   | $\top$   | T   | 1       | 1                  | 1 |                 | 132      | 寸         | $\top$  | 十   | $\top$  | T   | 1                       | П            |                 |
|          | 33       | T  | 1            | T  | T            | Т        | Т              | $\vdash$ | $\vdash$ | $\dashv$ | <br>     |        | 83       | Н              | 十           | 十   | $\dashv$                                       | $\top$   | $\top$  | $\top$  | $\top$             | ١ | $\Box$          | 133      | $\dashv$  | $\top$  | 十   | 十       | 7   | $\top$                  | $\vdash$     | Н               |
|          | 34       | H  | $\vdash$     | $\vdash$   | $\vdash$     | $\vdash$ | 1              | $\vdash$ | Н        | $\dashv$ | F        |        | 84       | Н              | $\dashv$    | $\dashv$  | $\dashv$                                       | +  | +   | +       | $\top$             | 1 | $\vdash$        | 134      | $\dashv$  | +   | +   | +       | +   | +                       | $\vdash$     | $\vdash$        |
|          | 35       |  | t            | t  | T            |          | 1              | Т        | Н        | $\dashv$ | H        |        | 85       | Н              | $\dashv$    | $\dashv$  | +  | $\top$   | $\top$  | +       | +                  | 1 |                 | 135      | $\dashv$  | $\top$  | 十   | +       | $\top$  | $\top$                  | T            | Н               |
| <b>—</b> | 36       | $\vdash$   | $\vdash$     | t  | $t^{-}$      | 1        | 1              | $\vdash$ | H        | $\dashv$ | H        |        | 86       | $\vdash$       | -           | +   | +  | +  | +   | +-      | +-                 | 1 | <b></b>         | 136      | $\dashv$  | +   | 十   | +       | +   | +                       | $\vdash$     | $\vdash$        |
|          | 37       | $\vdash$   | -            | $\vdash$   | +-           | 1        | $\vdash$       | $\vdash$ | Н        | $\dashv$ | 卜        | _      | 87       | $\vdash$       | $\dashv$    | +   | +  | $\dashv$                                       | +   | +       | +                  |   |                 | 137      | +         | +   | 十   | +       | +   | +                       | $\vdash$     | $\vdash$        |
| <u> </u> | 38       | ┢  | 1            | ╁╌   | +-           | ╁        | +-             | $\vdash$ | Н        | -        | H        | _      | 88       | Н              | $\dashv$    | +   | +  | +  | +   | +       | +-                 | 1 |                 | 138      | +         | +   | +   | +       | +   | +                       | $\vdash$     | $\vdash \vdash$ |
| $\vdash$ | 39       | ⊢  | $\vdash$     | $\vdash$   | $\vdash$     | +        | $\vdash$       | $\vdash$ | Н        | $\dashv$ | -        |        | 89       | $\vdash$       | $\dashv$    | +   | +  | +  | +   | +       | +                  | ł | $\vdash$        | 139      | +         | +   | +   | +       | +   | +                       | $\vdash$     | $\vdash \vdash$ |
| -        | 40       | ├  | <del> </del> | ╁  | +            | ╁        | +-             | +        | $\vdash$ | $\dashv$ | $\vdash$ |        | 90       | $\vdash\vdash$ | $\dashv$    | $\dashv$  | -+-  | - -  | +   | +       | +-                 | 1 |                 | 140      | $\dashv$  | -   | +   | +       | +   | +                       | $\vdash$     | Н               |
| -        |          | $\vdash$   | -            | $\vdash$   | $\vdash$     | $\vdash$ | $\vdash$       | $\vdash$ | Н        | $\dashv$ | $\vdash$ |        |          | $\vdash$       | $\dashv$    | $\dashv$  | +  | +  | +   | +       | +                  | 1 |                 |          | $\dashv$  | +   | +   | +       | +   | +                       | Н            | Н               |
|          | 41       | ⊢  | $\vdash$     | $\vdash$   | ╀            | $\vdash$ | ╀              | $\vdash$ | Н        | _        | F        |        | 91       | $\vdash$       | -           | +   | +  | +  | +-  | +       | +                  | ł | $\vdash$        | 141      | $\dashv$  | +   | +   | +       | +   | +                       | $\vdash$     | Н               |
| ļ        | 42       | ⊢-   | ⊢-           | $\vdash$   | $\vdash$     | $\vdash$ | +              | -        | Н        | $\dashv$ | $\vdash$ |        | 92       |                | -           | +   | +  | -  | +   | +       | +-                 | ł |                 | 142      | -         | +   | +   | +       | +   | +                       | $\vdash$     | Н               |
| <u></u>  | 43       | <del> </del> —                                   | ⊢            | -  | $\vdash$     | $\vdash$ | ╀              | ₩        | $\vdash$ | -        | -        |        | 93       | $\vdash$       | -           | 4   | +  | 4  | +   | +       | +                  | l | <u> </u>        | 143      | $\dashv$  | -   | +   | +       | +   | +                       | $\vdash$     | Н               |
| <u></u>  | 44       | <u> </u>   | <u> </u>     | <b>—</b>   | $\vdash$     | $\vdash$ | -              | 1        | Ш        | _        | L        |        | 94       | Ш              |             | $\perp$   | 4  | 4  | $\bot$  | +       | -                  | 1 | <u> </u>        | 144      | $\perp$   | $\perp$   | 4   | $\bot$  | 4   | +                       | $\perp$      | $\sqcup$        |
| <u></u>  | 45       | <u> </u>   | <u> </u>     | <u> </u>   | L            | 上        | $\vdash$       | 丄        | Ш        | _        | L        |        | 95       |                |             | Ц.  | $\perp$  |  | Ц.  | $\perp$ | _                  | 1 | <u> </u>        | 145      | $\perp$   |   | _   | _       | _   | 4                       | $\sqcup$     | Ш               |
| L        | 46       | lacksquare                                       | L            | _  | 丄            | 1        | <del> </del>   | _        |          | _        | L        |        | 96       |                |             | $\bot$  | $\perp$  | $\perp$  | 1   | $\perp$ | 1                  | 1 |                 | 146      | $\perp$   | _ _   | _   | $\perp$ | $\perp$   | ↓_                      | $\perp$      |                 |
|          | 47       | L  | 1_           | L  | L            |          |                | _        |          | $\Box$   |          |        | 97       |                |             | $\perp$   | $\perp$  |  | 丄   |         | 1                  | ] |                 | 147      | $\perp$   | $\perp$   | $\perp$   | $\perp$ | $\perp$   | $\perp$                 |              |                 |
|          | 48       | 匚  |              | Ĺ  | Ĺ            |          | ┖              | L        |          |          |          |        | 98       |                |             | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ | $\perp$  | $oldsymbol{\perp}$                             | $\perp$   |         |                    | J |                 | 148      | $\Box$    | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ |   |         |   |                         | $\Box$       |                 |
|          | 49       | Ĺ  |              |  |              |          | Ĺ              |          |          |          |          |        | 99       |                |             | $\Box$  | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{I}}}$ | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{I}}}$ | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Gamma}}}$ | ┙       |                    | ] |                 | 149      | $_{ m T}$ | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{I}}}$    | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ | floor   | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ | $oldsymbol{\mathbb{L}}$ |              |                 |
|          | 50       |  |              |  | $oxed{\Box}$ |          |                |          | П        |          |          |        | 100      |                |             |   |  |  |   |         |                    |   |                 | 150      |           |   |   |         |   |                         |              |                 |
|          |          |  |              |  |              |          |                |          |          |          |          |        |          |                |             |   |  |  |   |         |                    |   |                 |          |           |   |   |         |   |                         |              |                 |